



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,308	09/02/2003	Yury Mikhailovich Rogovsky	CU-3344 RJS	2775

26530 7590 07/26/2005

LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1600
CHICAGO, IL 60604

EXAMINER

WILSON, JOHN J

ART UNIT PAPER NUMBER

3732

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/653,308

Applicant(s)

ROGOVSKY, YURY
MIKHAILOVICH

Examiner

John J. Wilson

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Rogovsky (RU 2030904). Rogovsky shows a head 9, turbine 10, mounting seat at numeral 1 that provides for 360 degree rotation, first light guide 5 and second light guide 12 with outlet as shown in Fig. 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 8, 10-15 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogovsky (RU 2030904). Rogovsky shows a head 9, turbine 10, mounting seat at numeral 1 that provides for 360 degree rotation about an axis of body 9, an instrument mount as shown, gas feed aperture 7, body seat and gas feed channel 7, and intermediate gas channel as shown in Fig. 5 that feeds the gas to the head when the head is in any position. It would be obvious to one of ordinary skill in the art that the

Art Unit: 3732

feed and exhaust channels must be in contact throughout the 360 degree rotation of body 9 in order for the tool to work as described. It is held that Rogovsky clearly shows an annular exhaust channel encircling the axis as the space shown in which the end of gear 13 is located, Figs. 2 and 5. While Rogovsky does not show complete details of how the feed channel meets along the rotating body 9, it is held that the space shown at the very top of body 9 that connects to channel 7 as shown in Fig. 5 is an annular feed channel encircling the axis. This channel is also shown in Fig. 4 with pin 17 intersecting it and labeled pin in Fig. 2. In view of the above, one of ordinary skill in the art would find it obvious to include an annular feed channel in order to allow for the 360 degree rotation. As to claim 2, the shown channel 7 is held to be a nozzle. As to claims 3 and 4, see exhaust channel 8. As to claim 5, see means for securing the head 17. This securing means is held to inherently meet the limitation of "fast" because the terminology is relative. As to claim 8, the channels are shown to be located at an end of the head. As to claim 10, see mechanical drive 3. As to claim 11, see elements 2 and 13. As to claim 12, comparing the shown size of gear 3 with the diameter of sleeve 2, it is held that a reduction gear is shown.

Claims 6, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogovsky (RU 2030904) in view of Rogovsky (RU 96101748). Rogovsky (904) shows the structure as described above, however, does not show the shape of a head and body forming a body of rotation. Rogovsky (748) shows a shape that is held to be a body of rotation. It would be obvious to one of ordinary skill in the art to modify

Art Unit: 3732

Rogovsky (904) to include the shape of the head and body as shown by Rogovsky (748) in order to make use of known shapes to better fit within the mouth. As to claims 9 and 16, Rogovsky (904) shows a pin 17, however, does not clearly show a fixation device for the head. Rogovsky (748) shows fixation device 18, 19. It would be obvious to one of ordinary skill in the art to modify Rogovsky (904) to include a fixation device as shown by Rogovsky (748) in order to hold the head in its desired location during use. Because mechanical fixation forces are typically much stronger than the fluid force used to turn a turbine, it would be obvious to include a fixation force that is greater than the stopping force of the turbine.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogovsky (RU 2030904) in view of Berg (5052924). Rogovsky shows the structure as described above, however, does not show a gas discharge for cleaning the light outlet. Berg teaches that it is known to clean a lens using a discharge and that dental drills have air spray that can be used to accomplish lens cleaning, column 2, lines 29-35. It would be obvious to one of ordinary skill in the art to modify Rogovsky to include using a gas discharge to clean the light outlet as suggested by Berg in order to keep the light free from obstruction.

Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogovsky (RU 2030904) in view of Rosenstatter (5476380). Rogovsky shows a head 9, turbine 10, mounting seat at numeral 1 that provides for 360 degree rotation about an

Art Unit: 3732

axis of body 9, an instrument mount as shown, gas feed aperture 7, body seat and gas feed channel 7, and intermediate gas channel as shown in Fig. 5 that feeds the gas to the head when the head is in any position. It would be obvious to one of ordinary skill in the art that the feed and exhaust channels must be in contact throughout the 360 degree rotation of body 9 in order for the tool to work as described. It is held that Rogovsky clearly shows an annular exhaust channel encircling the axis as the space shown in which the end of gear 13 is located, Figs. 2 and 5. While Rogovsky does not show complete details of how the feed channel meets along the rotating body 9, it is held that the space shown at the very top of body 9 that connects to channel 7 as shown in Fig. 5 is an annular feed channel encircling the axis. This channel is also shown in Fig. 4 with pin 17 intersecting it and labeled pin in Fig. 2. In view of the above, one of ordinary skill in the art would find it obvious to include an annular feed channel in order to allow for the 360 degree rotation. Rogovsky does not show a micromotor, however, teaches that the drive may be manual or a drive. In view of this teaching, to use a motor as a drive would be an obvious matter of choice to one of ordinary skill in the art in a suggested alternative for driving a gear. Rogovsky does not show a gas feeding channel connected to the motor as claimed. Rosenstatter shows a feed channel 6', 9 that is connected to both the motor 5 and the turbine 8 in the head. It would be obvious to one of ordinary skill in the art to modify Rogovsky to include a feed channel as shown by Rosenstatter in order to operate the motor when needed. As to claim 21, Rogovsky shows a gear connection. As to claim 22, Rosenstatter teaches connecting the feed to the motor 5 or turbine 8, column 3, lines 15-25. As to claim 23,

Art Unit: 3732

Rosenstatter shows a drive that can be turned in either direction and suggests using a motor, therefore, it would be obvious to the skilled artisan to use a reversible motor to drive the head in either direction. As to claim 24, to use an electric motor is an obvious matter of choice in well known motors to one of ordinary skill in the art. As to claim 25, see connection shown in Fig. 8 of Rosenstatter. The connection is held to be rapidly detachable because "rapidly" is a relative term.

Claims 1-9, 16, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glover et al (4281989). Glover shows a dental hand piece 10, head 16, turbine 92, has feeding aperture at 103, body 12, 14, having a head mounting seat 52, 54, gas feeding channel 20, 80, 82, and intermediate gas feeding channel 84a that remains connected to the gas feeding channel when the head is turned. Glover teaches an infinite adjustment of head 16 at column 2, lines 55-58. That the head can make a complete rotation with respect to seat 52 would be obvious in view of the annular channels shown. The axis of rotation of the head of Glover is through 110 and 116, Fig. 7, and an annular feed channel 84a is shown encircling this axis. As to claim 2, see nozzle 102. As to claim 3, see outlet aperture 86 in the head that is connected at any position to a discharge channel 22. As to claim 4, see intermediate gas discharge channel 86 that encircles the axis. As to claim 5, see means 30, 32 for securing the head. Such means is inherently "fast" because the terminology is relative. As to claim 6, the outer surface of 16, 26 inherently form a body of rotation. As to claim 7, see chuck 94. As to claim 8, to call the portion of the head that is shown as having the

Art Unit: 3732

channels, an end, is merely terminology. Glover does not specifically state the device the mechanism used for discrete fixation of the head at a chosen position, however, does teach the device is capable of incremental adjustment. To use means to hold the head in the incremental adjusted positions would have been obvious to one of ordinary skill in the art in order to make the hand piece usable for drilling in the mouth. Because mechanical fixation forces are typically much stronger than the fluid force used to turn a turbine, it would be obvious to include a fixation force that is greater than the stopping force of the turbine.

Drawings

The drawings are objected to because text should not be used on the drawings. A reference symbol should be used and then explained in the specification.

Response to Arguments

Applicant's arguments filed June 10, 2005 have been fully considered but they are not persuasive. The prior art does shown channels encircling a rotation axis as described above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

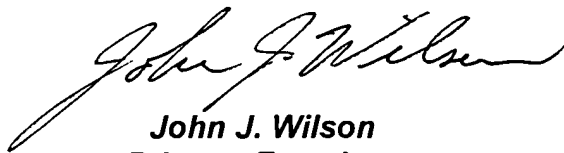
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver, can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "John J. Wilson". The signature is fluid and cursive, with a long, sweeping underline.

John J. Wilson
Primary Examiner
Art Unit 3732

jjw
July 22, 2005